DOCUMENT RESUME

ED 325 367 SE 051 703

AUTHOR	Dossey, John
TITLE	Discrete Mathematics and the Secondary Mathematics Curriculum.
INSTITUTION	National Council of Teachers of Mathematics, Inc., Reston, Va.
PUB DATE	90
NOTE	65p.
AVAILABLE FROM	National Council of Teachers of Mathematics, 1906 Association Drive, Reston, VA 22091 ($6.00).
PUB TYPE	Guides - Non-Classroom Use (055)
EDRS PRICE	Document Not Available from EDRS.
DESCRIPTORS	Algebra; Algorithms; Computer Software; Curriculum Guides; Decision Making; Geometry; Induction; Instructional Materials; Junior High Schools; *Mathematical Concepts; Mathematics Curriculum; *Mathematics Education; Models; Problem Solving; Resource Materials; Secondary Education; *Secondary School Mathematics; *Teaching Methods; Technology; *Thinking Skills
IDENTIFIERS	*Discrete Mathematics

ABSTRACT

Discrete mathematics, the mathematics of decision making for finite settings, is a topic of great interest in mathematics education at all levels. Attention is being focused on resolving the diversity of opinion concerning the exact nature of the subject, what content the curriculum should contain, who should study that material, and how that material should be taught in the classroom. This document details a set of recommendations on the infusion of topics from discrete mathematics into the secondary school (grades 7-12) mathematics curriculum. The suggestions are accompanied by a list of resources, including software, which will aid in the development of specific topics. Modeling, use of technology, algorithmic thinking, recursive thinking, decision making, and mathematical induction as a way of knowing are six unifying themes that emerge when discrete mathematics is studied and applied. Recommended topics for emphasis in discrete mathematics before algebra, with algebra, and with geometry are included. Appended is an outline for a semester course in discrete mathematics. (KR)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

THIS

DOCUMENT

NOT

AVAILABLE

FROM

EDRS